Claims

- A method for preparing a secondary aminoisobutylalkoxysilane comprising 1.
- hydrosilating a secondary methallylamine with a hydridoalkoxysilane in the 5 presence of an effective amount of a hydrosilation catalyst.
 - The method of Claim 1 wherein the secondary aminoisobutylalkoxysilane is 2.

$$R^{1}NH-T-SiR^{3}_{a}(R^{2})_{3-a}$$

10 the hydridoalkoxysilane is

$$HSiR^3_a(R^2)/_{\beta-a}$$

and the secondary methallylamine is

is
$$HSiR^{3}_{a}(R^{2})_{3-a},$$
 Ilylamine is
$$R^{1}NH-(U-O_{m})_{u}-CH_{2}-CH(CH_{3})=CH_{2},$$

SUB (2) where R¹ represents an alkyl group having 1/to 30 carbon atoms, optionally interrupted

15 with one or more ether oxygen atoms and/or substituted with a carbonyl oxygen atom, an aryl, alkaryl, or aralkyl group having 6 to/10 carbon atoms, or a group of the formula

$$-X/SiR^3_a(R^2)_{3-a};$$

R² represents an alkoxy group having 1 to 6 carbon atoms or an aryloxy, alkaryloxy, or aralkyloxy group having 6 to 10 carbons, R3 represents an alkyl group of 1 to 6 carbon

20 atoms or an aryl, alkaryl, or aralkyl group having 6 to 10 carbon atoms; a is 0, 1 or 2; U represents a divalent linear, cyclic or branched hydrocarbon group of 1-6 carbon atoms

which may be optionally interrupted by one or more ether oxygen atoms and/or substituted with a carbonyl oxygen atom; m is 0 or 1; u is 0 or 1; T is

- 25 and X is an alkylene group of 3 to 11 carbon atoms or T.
 - The method of Claim 2 wherein R1 represents an alkyl group of 1 to 4 3. carbon atoms, an apyl group of 6 to 10 carbons, or a group of the formula

$$-X-SiR^{3}_{a}(R^{2})_{3-a}$$
,

R² represents an alkoxy group of 1 to 3 carbon atoms, R³ represents an alkyl group of 1 to 4 carbon atoms, T represents a branched alkylene radical of 4 to 8 carbon atoms comprising at least an isobutyl group, U represents a terminally unsaturated hydrocarbon group of 1 to 4 carbon atoms, X represents an alkylene radical of 3 to 6 carbon atoms or 5 T, a is 0 or 1, and m is 0.

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- 4. The method of Claim 1 wherein the hydridoalkoxysilane is selected from the group consisting of trimethoxysilane, triethoxysilane, methyldimethoxysilane, and methyldiethoxysilane; the secondary methallylamine is selected from the group consisting of N-ethylmethallylamine, N-phenylmethallylamine, and dimethallylamine; and the hydrosilation catalyst comprises platinum.
- 5. The method of Claim 1 wherein the hydrosilation catalyst is a noble metal-containing catalyst selected from the group of platinum, rhodium, iridium, ruthenium, and osmium, and said effective amount is from 5 to 500 parts per million by weight of noble metal relative to the combined weights of the hydridoalkoxysilane and the secondary methallylamine, the molar ratio of hydridoalkoxysilane to secondary methallylamine is in the range of 0.2 to 5.

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- 6. The method of Claim 5 wherein the hydrosilating step is performed at an elevated temperature in the range of 50 to 150°C, and at atmospheric pressure.
- 7. The method of Claim 6 wherein the secondary methallylamine is a compound having a single methallyl group or dimethallylamine, the elevated
 25 temperature is in the range of 60 to 120°C and the molar ratio of hydridoalkoxysilane to secondary methallylamine is 1 to 1.2 for secondary methallylamines with one methallyl group, and 2 to 2.4 for dimethallylamine.

- 8. The method of Claim 5 wherein the platinum catalyst is selected from the group of homogeneous solutions of chloroplatinic acid and homogeneous solutions of vinylsiloxane complexes of platinum, and the effective amount represents 10 to 100 parts per million by weight of platinum relative to the combined weights of the 5 hydridoalkoxysilane and the secondary methallylamine.
 - 9. The method of Claim 1 wherein the secondary methallylamine is added to a mixture comprising the hydridoalkoxysilane and the hydrosilation catalyst at an elevated temperature.
 - 10. The method of Claim 1 further comprising adding an alcohol to the reaction product of the hydrosilating step.
- 11. The method of Claim 1 further comprising subsequently purifying the secondary aminoisobutylalkoxysilane.
 - 12. The method of Claim 1 wherein said hydrosilating step is conducted at a elevated temperature.